

303 0.500

Work Order ID 131105

131105

Page 1

Item ID: D3622-1

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Ball Stud

Start Date: 3/26/15 Start Qty: 10.00

10

Cust Item ID:

Required Date: 3/26/15 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals: Process Plan: MLS Date: 15-03-31

Tooling:

Date:

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3622	Rev C								

100

0.00

100

Hardinge CNC LATHE SMALL

Hardinge

Memo

0.00

Hardinge CNC Lathe Small

1-TURN AS PER FOLIO FA686 & DWG D3622 ,

FOLIO REV: AADWG REV: C

2-DEBURR AS REQUIRED

DAS
40
9-89

15/04/09

110

0.00

110

QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

DAS
40
9-89

15/04/09

120

0.00

120

QC8- Inspect parts - second check

QC

Memo

0.00

Quality Control

DAS
37
9-89

15.04.09

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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DQA: _____ Date: _____



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Picklist Print

March-26-15 1:42:15 PM

Page 1

Work Order ID: 131105

131105

Parent Item: D3622-1

D3622-1

Parent Item Name: Ball Stud

Start Date: 3/26/15

Required Date: 3/26/15

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP Rev:A New Issue 07-04-24 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M303H0.500		Purchased	No			100	f	7.5900	0.108	2			
M303H0 500									**				DAS
303 HEX BAR .500												15/04/09	40 9-09

Location

Loc Qty

Loc Code

MAT018

7.59

→

m128882

7.59

2.0

DQA: _____ Date: _____



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DART AEROSPACE LTD		Work Order: 131105
Description: Ball Stud		Part Number: D3622-1
Inspection Dwg: D3622	Rev: C	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

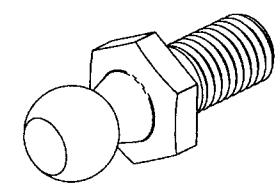
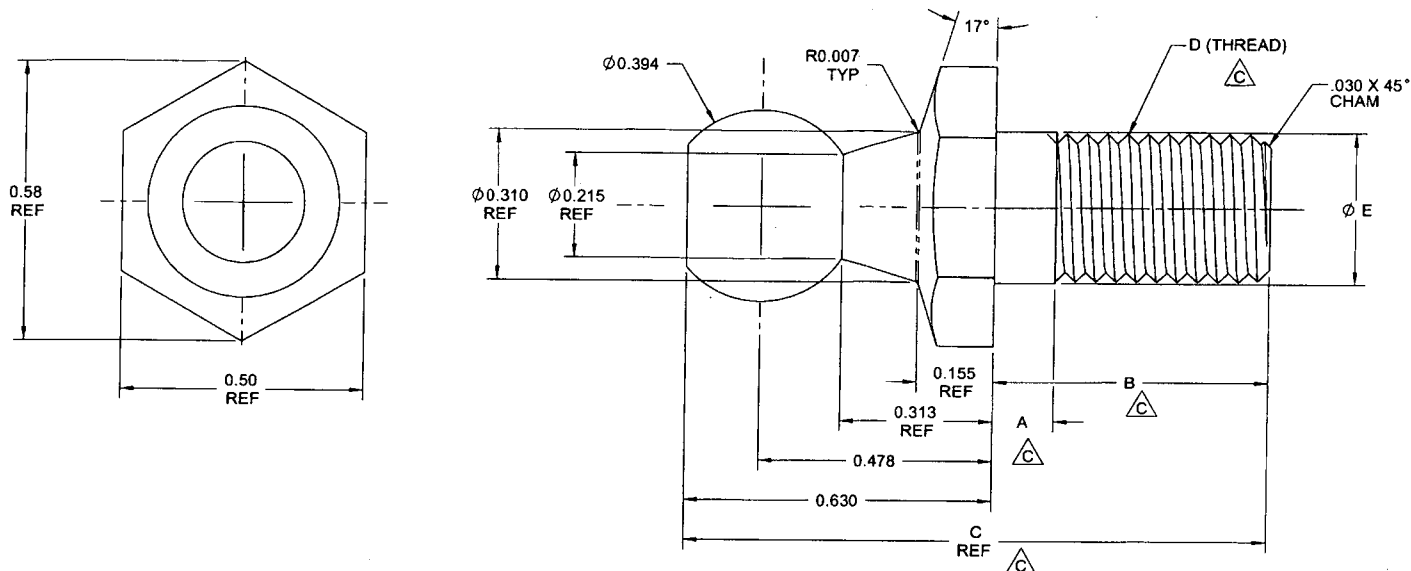
☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.58	+/-0.030	.570	✓		VGRN	REV-12
0.50	+/-0.030	.497	✓		"	"
Ø0.394	+/-0.010	.394	✓		"	"
Ø0.310	+/-0.010	.305	✓		"	"
Ø0.215	+/-0.010	.215	✓		"	"
0.155	+/-0.010	.155	✓		"	"
0.313	+/-0.010	.320	✓		"	"
0.478	+/-0.010	.478	✓		"	"
0.630	+/-0.010	.632	✓		"	"
0.125	+/-0.010	.127	✓		"	"
0.563	+/-0.010	.563	✓		"	"
1.19	+/-0.030	1.193	✓		"	"
0.3125-24UNF-3A	+0.000/-0.072	.3105	✓		Mic	REV-02
M.O.W.	Min = 0.3336 Max = 0.3363	.3352	✓		"	"

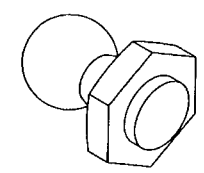
Measured by: DAS 40 9-89		Audited by: DAS 37 9-89		Preliminary Approval:	
Date: 15/04/09		Date: 15.04.09		Date:	

Rev	Date	Change	Revised by	Approved
A	08.04.15	New Issue	KJ/DD	
B	10.02.02	Dwg Rev updated	KJ	
C	11.02.18	Dimensions updated per Dwg Rev C	KJ	

8 7 6 5 4 3 2 1



D3622-1 BALL STUD SHOWN



D3622-11 BALL STUD SHOWN

PART NUMBER	DIM A	DIM B	DIM C	WEIGHT (LBS)	THREAD D	Ø E MIN	Ø E MAX
D3622-1	0.125	0.563	1.19	0.03	0.3125-24UNF-3A	0.3053	0.3125
D3622-3	0.125	0.563	1.19	0.03	0.1875-32UNF-3A	0.1840	0.1900
D3622-5	0.090	0.900	1.53	0.04	0.3125-24UNF-3A	0.3053	0.3125
D3622-7	0.060	0.330	0.96	0.03	0.3125-24UNF-3A	0.3053	0.3125
D3622-9	0.090	1.160	1.79	0.04	0.3125-24UNF-3A	0.3053	0.3125
D3622-11	0.060	N/A	0.69	0.02	NOT THREADED	0.270	0.300
D3622-13	0.090	0.680	1.31	0.03	0.3125-24UNF-3A	0.3053	0.3125

D3622-X BALL STUD

SPOT COPY
UNCLASSIFIED
SERIALIZED
NOV 13 11 05
15-03-31

RELEASED
2010-09-23

- NOTES:**
 1) MATERIAL: AISI 303 HEX BAR
 REF DART SPEC M303H0.500
 2) FINISH: N/A
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 6) IDENTIFICATION: IDENT P/N D3622-X & B/N PER QSI 044
 7) WEIGHT: SEE D3622-X TABLE

REV.	DESCRIPTION	BY	DATE
C	SHEET 1: ADD -5, -7, -9, -11 & -13. ADD D3622-X TABLE. SHEET 2 DELETED	JPH	10.07.20
B	ADD -3 (SHEET 2)	HS	09.09.18
A	NEW ISSUE	MB	07.04.13
DESIGN	JPH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. D3622 TITLE BALL STUD REV. C SHEET 1 OF 1 SCALE NTS COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DRAWN	JPH		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.07.20		